

## COURSE SYLLABUS (SPRING 2020)

**COURSE:** ORAL RADIOLOGY II (Lecture 1 Hr / Lab 2 Hrs = 2 Credit Hours)

**DAY/TIME:**

Lecture: Wednesday 3-4:00

Lab: Thursday PM As Assigned

**LOCATION:**

Centennial Hall- Room #103 (Lecture)

Gaines Dental Hygiene Clinic- Radiology Area Room #132 (Lab)

**INSTRUCTOR:** Ray H. Hyde DDS

**Office:** Centennial Hall Room #128, Ext 4650

Monday - Thursday 7:00 AM-4:00 PM

Friday 8-11:00 AM

(Or by appointment)

**REQUIRED**

**TEXTS:**

Essentials of Dental Radiography for Dental Assistants & Hygienists, 10<sup>th</sup> Ed, Johnson & Thomson

**Supplemental Resources Available from Dental Hygiene Program**

Radiographic Interpretation for the Dental Hygienist, Haring & Lind

Principles of Dental Imaging, Langland & Langlais

Dental Radiography Principles and Techniques, Haring & Lind

**COURSE**

**DESCRIPTION:** As listed in the most current MSU Catalog (2019-2020)

**DNHY 3102 Oral Radiology II** Prerequisite: DNHY 3002 2(1-2)

Hands on oral radiology; includes practical experience in both laboratory and clinical applications. Students gain experience in mounting and interpretation of dental radiographs. Also includes discussions of infection control in radiographic procedures, quality assurance in dental radiography, intra and extraoral film placement criteria, and principles of panoramic radiography.

**COURSE**

**PURPOSE:**

The purpose of this course is to provide the laboratory experience for students to develop competency in the intraoral technique skills necessary to produce diagnostic-quality periapical, bitewing, occlusal, and panoramic radiographs. Students will expose radiographs on child and adult manikins in lab and patients in the clinical setting. Students will gain practical experience in the processing, mounting, and preliminary interpretation of radiographs, as well as infection control procedures and quality assurance in dental radiography. Panoramic radiography and other extra oral techniques are also included.

**COURSE OBJECTIVES:** Given laboratory practice, lecture, discussion and slide identification, upon successful

completion of this course the student should be able to:

1. Contrast and compare intraoral techniques (paralleling, bisecting and occlusal) and explain the rationale for the use of each.
2. Expose diagnostically acceptable intraoral surveys using the paralleling technique with RINN XCP instruments.
3. Correctly process films using available darkroom facilities.
4. Demonstrate competency in following infection control procedures used during radiographic procedures.
5. Correctly mount full mouth and bitewing surveys.
6. Self evaluate (analyze) errors in film placement, exposure, and processing and be able to correct them.
7. Demonstrate an appreciation for control of ionizing radiation exposure in the dental environment by consistently adhering to the MSU Exposure Protocol.
8. Correctly identify both normal and abnormal anatomy on dental radiographs.
9. Correctly identify and chart existing restorations, caries, condition of alveolar bone, missing/unerupted/impacted teeth and any other radiolucent or radiopaque abnormality.
10. Discuss various techniques for Extraoral dental radiography and indications for their application.
11. Apply quality control techniques for the darkroom and film processing.
12. Ascertain the need for and then utilize alternative techniques (panoramic or occlusal films) for children, partially edentulous patients, elderly, etc.
13. Demonstrate the operation of the panoramic x-ray machine.

Each assigned chapter has a list of more specific objectives relative to the content of that chapter.

## **COURSE GRADING:**

### **EXAMINATIONS:**

Three examinations (including the Final Exam) will be given for the lecture portion of this course. **Each Examination is worth 33.33% of the final course grade.**

Examinations will be comprehensive from the first day of class. Students missing an examination due to illness will be allowed to make up the exam on the day of their return to school. No grade higher than a 90 will be given for a make-up examination. Students will be allowed to make up only one (1) exam per semester.

**Water bottles, cell phones, hand-held calculators/computers are not allowed in the room during any examination. Possession of any of these items during an exam will be construed as academic dishonesty and will be dealt with accordingly.**

### **DENTAL HYGIENE PROGRAM GRADING SCALE**

92-100 = A

83-91 = B

75-82 = C

**75 AVERAGE IS THE MINIMUM ACCEPTABLE GRADE**

65-74

= D

**FOR SUCCESSFUL COMPLETION OF THIS COURSE**

### **LAB REQUIREMENTS/GRADING:**

The Laboratory portion of this course is Pass/Fail.

1. Each student must complete five (5) full mouth surveys (FMS) on the manikin at a **technique competency level of 90 or greater**. Two grades will be given for each FMS.

**A. Technique Grade:** Must be  $\geq 95$  to count toward the required five surveys. One (1) point deduction (as noted on the Radiology Grade Form) will be made for each major error. A film may exhibit more than one major error.

**B. Findings Grade:** Consists of 4 areas (see below). Minimum passing grade = 75

**Critique:** Students will critique their films and suggest corrections.

One (1) point will be deducted for each error on the critique.

- **Normal Anatomic Landmarks:**

One (1) point deduction for each landmark omitted or incorrectly identified.  
**This form must be completed on full mouth surveys taken on patients.**

- **Radiographic Findings:**

One (1) point deduction for each omission or misinterpretation.

**This form must be completed for all surveys taken on patients. It becomes a permanent part of the patient's record and is legal documentation of our evaluation of the survey for pathology. It must be done in ink.**

- **Patient Referral Form:**

Any pathology noted Radiographically must be documented on the Patient Referral Form at the time the radiographs are submitted for grading.

2. Upon completion of five manikin FMS's at  $\geq 95$  competency level the student will then expose an unassisted FMS on a TEST case.

3. If the TEST survey meets the  $\geq 95$  competency level it will be returned to the student to prepare the written report which includes a critique, normal anatomic landmarks and radiographic findings.

4. After successful completion of the TEST FMS and written report students may then be assigned routine clinical radiology patients.

**EXCEPTION:** Specific instruction and practice exposing bitewing radiographs (BW) will be covered at the beginning of this course in order to permit students to expose BW's on clinical patients as early as possible in Clinical Practice II (DNHY 3003). **Approval for taking BW's on clinical patients MUST be given by the radiology course instructor prior to exposing BW's on patients.**

Clinical Practice II radiography requirements will be discussed during the course introduction and orientation.

**5. The following situations may result in failure of the laboratory portion of this course.**

- Exposing a patient to x-radiation without authorization from faculty.
- Exposing a patient to x-radiation without protective covering.
- Losing a patient's radiographs

#### **ATTENDANCE:**

Attendance and punctuality is expected. Lab sessions will begin promptly at the designated time and students will be expected to remain for the full two hours. Lab sessions must be attended as scheduled unless other arrangements have been made **in advance with the course instructor.**

**More than two (2) absences (Lab or lecture) for any reason will result in a loss of 5 points from final course grade for EACH absence over the allowed 2.** In cases of extreme illness and/or hospitalization,

individual decisions may be made. **LAB ATTIRE:** Scrubs must be worn for all radiology lab sessions. Hair must be up according to MSU Dental Hygiene Clinical Protocol.

**PREGNANCY:** In case of pregnancy faculty must be notified immediately. Continuation in the course will be determined on an individual basis and will require additional radiation worker protection.

#### **ACADEMIC DISHONESTY**

##### **Dental Hygiene Honor System:**

**All Dental Hygiene courses adhere to the MSU Code of Conduct.** In particular, academic dishonesty, however small, creates a breach in academic integrity. A student's participation in this course comes with the expectation that his or her work will be completed in full observance of the MSU Code of Student Conduct. A student should consult the current Student Handbook for answers to any questions about the code. Many components of dental hygiene courses are designed to be highly interactive with

students helping each other learn. Students are encouraged to take full advantage of many resources available including course resources, Internet sites, other textbooks and journals, faculty, and peers when answering objectives. This interactive collegial learning environment is conducive for life-long learning.

Cheating includes, but is not limited to, (1) use of any unauthorized assistance in taking quizzes, tests, or examinations; (2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or completing other assignments; or (3) the acquisition of tests or other academic materials belonging to the university faculty or staff without permission.

Plagiarism includes, but is not limited to, the use of, by paraphrase or direct quotation without correct citation in the text and on the reference list, the published or unpublished works of another person. Students may NOT submit papers and assignments that they have previously submitted for this or other courses. The use of materials generated by agencies engaged in "selling" term papers is also plagiarism. Students are encouraged to review the tutorials and suggested websites for more information about plagiarism.

Academic dishonesty (cheating, plagiarism, etc.) will not be tolerated in this class. Whenever a student is unsure of whether a particular situation will be interpreted as academic dishonesty, he/she should ask the instructor for clarification. If students are guilty of academic dishonesty, a grade of zero (0) will be given for the quiz, assignment, etc. Cases may also be referred to the Dean of Students for possible dismissal from the university.

#### PLEASE NOTE

*By enrolling in this course, the student expressly grants MSU a "limited right" in all intellectual property created by the student for the purpose of this course. The "limited right" shall include but shall not be limited to the right to reproduce the student's work product in order to verify originality and authenticity, and for educational purposes. Specifically, faculty may submit student papers and assignments to an external agency to verify originality and authenticity, and to detect for plagiarism*

### MSU COHSHS Student Conduct Appeals Committee

All Midwestern State University (MSU) students may legitimately appeal a course grade if 1) the student has not be evaluated according to the same criteria as his or her classmates, or 2) an error has been made in grading and/or posting (MSU Student Handbook, p. 37.) In addition, the Office of the Dean of Students has the responsibility to enforce standards of conduct for students as outlined in the MSU Student Handbook (p. 70-80).

When enrolled in the College of Health Sciences and Human Services (COHSHS), students are often assigned to community agencies, such as health care facilities, social service agencies, or athletic environments, as part of their academic process. During these experiences, the student is expected to behave in a manner required of professionals working in this environment. COHSHS students may also be required to successfully complete a licensing/certification process following graduation. As a result, students in these programs are often held to a different academic and/or behavioral standard than students in other MSU programs. For example, students may not be allowed to progress in a program if they have been unsuccessful (D or F) in a certain number of courses in the major. In these circumstances, COHSHS faculty and administration, all of whom have had similar professional experience, may make decisions which negatively impact students' programmatic progress.

COHSHS students have a right to a review of decisions made by the program faculty, which prevent individuals from progressing in their program in a timely manner. However, those who participate in the review must understand the context of the professions involved. Therefore, **issues concerning the professional conduct of students in the COHSHS will NOT be brought to the University Grade Committee, but to the COHSHS Student Conduct Appeals Committee.** Specifically, the COHSHS Student Conduct Appeals Committee will review faculty decisions related to:

- Student conduct in a clinical experience, internship, or other work-related environment that negatively impacts the student's academic progress. This conduct may include behavior which is prohibited by licensing and/or professional standards or departmental policy.
- Student removal from a program because of a) professional conduct issues or b) failure to maintain academic standards required specifically by the program\*

### SEE COHSHS WEB SITE FOR A COMPLETE COPY OF THIS POLICYThe Americans with Disabilities Act:

Midwestern State University does not discriminate on the basis of an individual's disability and complies with Section 504 and the Americans with Disabilities Act in its admission, accessibility, and employment of individuals in programs and activities. MSU provides academic accommodations and auxiliary aids to individuals with disabilities, as defined by law, who are otherwise qualified to meet academic employment requirements. For assistance call (940) 397-4618 or (940) 397-4515. It is the student's responsibility to declare any disabilities. After declaration, preferably at the beginning of each semester, the student needs to contact individual

instructors to determine any reasonable accommodations that may be required.